







Slow Food®

SERVING UP CARE FOR THE CLIMATE. SUSTAINABILITY IN RESTAURANTS IS POSSIBLE

#FOODFORCHANGE

Sustainability analysis of
Les Résistants restaurant in Paris,
in comparison with conventional
restaurant models

INDACO
INDicatori Ambientali e CO_2

Extracted from:
Sustainability Analysis and Carbon Footprint Calculation of the Les Résistants Restaurant
Commissioned by Slow Food as part of the DG ENV – NGOs Operating Grant 2019 – LIFE18 NGO/SGA/IT/200050 program
Photographs by @ Marine Brusson
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SUSTAINABLE AND "RESISTANT," IN DEFENSE OF THE CLIMATE

It is not just industry, transport, energy production from fossil fuels, and farming that produce greenhouse gases; even the simple activity of preparing meals, whether at home, in a restaurant, in a school cafeteria, or in a company canteen, produces emissions.

The resulting gases join those produced naturally by marine and terrestrial ecosystems to create the so-called "greenhouse effect," leading to global warming. This change to the climate is the biggest threat to the future of our planet.

Obviously not all production processes have the same influence on global warming.
Identifying and choosing products with less impact when we go shopping, or carefully evaluating our consumption choices, including those related to leisure, can bring about small changes. Together with the conscious choices of many other consumers, this can lead to change at a global level.

For several years Slow Food, with technical support from INDACO2 (a consultancy company composed of experts in sustainability and environmental communications) has been carrying out analyses of its Presidia projects to measure their environmental impact using universally recognized and applied scientific parameters. Emissions are measured using the life cycle analysis (LCA) method and their impact (carbon footprint) is expressed in kilograms or tonnes of carbon dioxide equivalent (CO2 eq).

After a series of analyses carried out on agricultural products, in 2019 Slow Food decided to focus attention on restaurants, convinced that this is also a context in which conscious and virtuous choices can make a significant contribution to reducing climate impacts. Few studies of this type exist, but considering the vital role that can be taken on by a chef, who touches the lives of hundreds of consumers every day, we have attempted to evaluate this complex activity in the hope of offering material for reflection to those working in this industry.
To this end, we have compared the impact of Les Résistants, a restaurant in Paris working in harmony with the Slow Food philosophy, with conventional restaurant models.
In order to have useful data for the development of the analysis, Les Résistants has been compared with a hypothetical restaurant that uses conventional suppliers but offers an identical menu, and also with a hypothetical restaurant that uses conventional suppliers and proposes a different, less "climate-friendly" menu. The results were startling.

In the first case (comparison with a conventional restaurant with a similar menu), **the impact of Les Résistants, a restaurant making sustainable choices in the kitchen and the dining room, is 50% less** than the restaurant using "conventional" suppliers. The comparison is even more striking–**4.5 times less impact!**–when the comparison is made with a conventional restaurant with a less "climate-friendly" menu, in other words with a greater number of dishes based on meat or dairy (as is the case in many restaurants).

In short, this study invites reflection, but most of all it offers a source of information and inspiration for anyone running a restaurant business who wants to make their contribution to the fight against climate change.

WHO ARE LES RÉSISTANTS?



RESTAURANT

Les Résistants
16-18 Rue du Château d'Eau
Paris, France
www.lesresistants.fr

WHERE ARE THEY



DAILY MEALS SERVED

120

PRICE OF A MEAL

20-25 €
average for lunch
30-40 €
average for dinner

Les Résistants is a restaurant, of course, but first and foremost it is the adventure of childhood friends who are passionate about cooking and good wine, and who have always loved traveling together around France to discover its terroirs and gastronomic treasures. These trips inspired them to create a restaurant that would forge a direct link between producers and food-loving citizens: Les Résistants. Together the friends sought out quality ingredients with which to stock their kitchen, both from the local area and the rest of France, selecting producers with an interest in sustainable agricultural practices.

Florent Piard, the restaurant's CEO, gave up his previous job to dedicate himself fully to the project, while his friend Clément Desbans became chef de cuisine. It took more than 4 years for them to select their suppliers, criss-crossing France's different regions to find the best products, uncover new treasures, and learn the stories behind them. During their journeys they met with over 250 producers in order to gain an understanding of their products (and taste them!), their skills and philosophy, and how they produce such excellent flavors using natural, environmentally friendly methods. Les Résistants ("The Resistants") are these producers, who dedicate their lives to rearing animals and cultivating crops out of passion and conviction, to save a skill, a tradition, a landscape, flavors, and sensations. They are the restaurant's foundation, its implicit spokespeople. The names and brief profiles of the restaurant's farmers, fishers, and food artisans are included on the menu. Currently the restaurant has relationships with a total of around 120 suppliers, plus 100 winemakers. All of their ingredients (except sugar, coffee, and pepper) come from this network of producers.

On top of this, the founders went a step further, setting themselves the challenge to provide quality, healthy, environmentally sustainable food at reasonable prices. The menu changes every day, for both lunch and dinner, and the kitchen team works with whatever is available from their suppliers. The products used in the restaurant are organic or otherwise produced using traditional methods, and are selected according to a strict protocol published on the restaurant website. The meat and vegetables come from local breeds and varieties, and none of the ingredients comes from conventional agriculture. Products are sometimes delivered directly by the producers, and otherwise shipped through a logistics platform in Rungis, which packs the products on pallets and sends them together to the restaurant. Les Résistants has cold storage, but its freezer is only used for homemade ice cream and in general the ingredients are prepped right after they arrive and served as soon as possible.

Florent and Clément recently opened another restaurant, L'Avant Poste (www.lavantposteparis.fr), which is the same size as Les Résistants but has an even smaller environmental impact because it uses half as much meat, fish, and eggs as Les Résistants, as well as less electricity and no gas.

Slow Food®
Cooks Alliance

Les Résistants will soon join the Slow Food Cooks' Alliance. This project unites over 40 cooks around France, as well as over 1,100 in 25 countries around the world, who are committed to preserving their local biodiversity and supporting small-scale local producers who practice sustainable agriculture and make good, clean and fair food.
You can find their names here: www.fondazioneslowfood.com/en/what-we-do/slow-food-chefs-alliance/

WHAT CHOICES HAS LES RÉSISTANTS MADE?



Meat

The meat comes only from hardy local breeds, and the restaurant buys whole carcasses from animal farmers. In this way they support local farming, promote biodiversity through the use of local breeds, honor the sacrifice represented by the slaughter of an animal, pay a fair price, give value to the skills of farmers, and introduce important artisanal knowledge back into the kitchen. The restaurant uses meat from nine local cattle breeds (some of which, including Villard-de-Lans, Armoricaine, and Bazadaise, are included in Slow Food's Ark of Taste catalogue), seven pig breeds (including Gascon, Basque, nustrale, blanc de l'Ouest, and others), seven sheep and goat breeds (Poitou, Rove, Pyrenean, etc.), and four poultry breeds (including the Gatinaise chicken)–and that's without counting the dairy breeds (five goat, ten cow, and five sheep). The meat is sourced from different regions–from Corsica, across Gers and the Vercors, to Brittany–and comes from small-scale, sustainable farms. In selecting meat producers, the restaurant considers about 30 different aspects, including air quality, pasture management, the animals' diet, self-sufficiency in the production of feed, animal welfare, respect for animals' natural growth cycles, and slaughter practices.



Fish

The fish is all caught sustainably from small boats (maximum of 12 meters and 3 fishers, making trips that are no longer than a day) and with respect for seasonality. The restaurant collaborates with Guillaume Gréaud (Ichtus) who, each evening, puts the chef in touch with his network of fishers. A wide variety of species is used in the kitchen, including some lesser-known types that are rarely found in restaurants, like white seabream. In general, the restaurant privileges species that are plentiful, even if they are not highly regarded. What's used varies depending on availability. About 95% of the fish comes from the sea (depending on the season, oysters, clams, scallops, mussels, octopus, pollock, and skate might be on the menu), while 5% comes from lakes (e.g. whitefish from Lake Geneva).



Fruits, vegetables, and herbs

The six growers that the restaurant works with are organic; they use no chemical products and even go beyond organic (none of them uses copper or sulfur). They work small plots of land (between 1 and 3 hectares) and use very little machinery (maybe a small tractor). These farmers use only traditional seeds, not commercial hybrids, and share Les Résistants's objectives of safeguarding biodiversity and restoring farmers' independence. The restaurant works closely with these growers to develop cultivation plans and evaluate varieties that are new to them, in order to find the very best flavors. The vegetables come primarily from Normandy, Brittany, Burgundy, and the Drôme. In the winter the restaurant buys pumpkins, turnips, potatoes, celery, parsnips, beets, yacón, Jerusalem artichokes, leeks, cabbage, and radishes. In the spring they use asparagus, lettuce, cabbage, peas, herbs, nettles, fennel, carrots, potatoes, and baby onions; and in the summer, tomatoes, zucchini, eggplant, cucumbers, peppers, lettuce, and green onions arrive. Legumes come from Seine-et-Marne and fruit comes from Île-de-France, Normandy, the Drôme, and Vaucluse, with citrus from Corsica. Each year the restaurant processes over 1,000 varieties of fruits, vegetables, legumes, and aromatic herbs.



Mushrooms

The restaurant's mushrooms (champignon, shiitake, oyster) come from a producer in Val-d'Oise, north of Paris, who grows mushrooms in the darkness of old chalk quarries, a traditional activity in Île-de-France.



Cheese

Cheese—always made with raw milk and without the use of selected starter cultures—comes from various French regions and is made from the milk of free-ranging animals of local breeds, fed with grass and hay (no silage). Respect for agroecological methods is essential, as is respect for ancestral cheesemaking knowledge, a fundamental aspect of the companies with which the restaurant works.



Wine

The wine comes from around 100 local organic, biodynamic, and natural French producers. It does not contain additives and only a small dose of added sulfites is allowed (less than 3g/L, but in about three quarters of cases it is less than 1g/L).



Bread

The bread comes from a bakery close to the restaurant (Maxime Bussy, Le Bricheton) that uses natural sourdough, heirloom grain varieties, and water from a local well. Everything is worked by hand, the fermentations are long, and nothing is pre-cooked.



Water

The water served at the tables, whether still or sparkling, is microfiltered tap water.



Waste management

The restaurant sorts its waste rigorously in order to recycle as much as possible. The kitchen team uses as much of the organic waste (meat trimmings, fish bones, vegetable skins, etc.) as possible, and anything that remains is collected twice a week by Les Alchemistes, who turn it into compost. This waste is treated just outside of Paris, unlike much of the city's waste, which may travel hundreds of kilometers to treatment facilities. Everything that comes out of the kitchen is sold, and the menu changes every day, for lunch and dinner.



Service

Tablecloths are not used (plates are set directly on the wooden tables) and customers are given cloth napkins, which are laundered at the restaurant. Single-use glasses, cups, and other items are not used.



General management

The detergents used in the kitchen, for cleaning, and in the bathroom are ecological and carefully selected. Gas is only used in the kitchen, while electricity is used partially for the heating (heat pump) as well as for the kitchen, cold storage, and lighting.



Menu

The menu changes every day and respects seasonality. It is developed based on the availability of ingredients from the suppliers and is heavily plant-based, with limited use of meat, fish, and dairy. Trimmings from the ingredients are reused as garnishes, condiments, or in soups. If a customer does not finish a dish, a cardboard box is provided for taking the leftovers home.

SIMPLE PLATES

A Charcuterie Stroll ... 19
Nustrale pork coppa (Pierre-Antoine Battini)
Salami and other cured meats
Peppered dried beef
(Emmanuel Chavassieux)

Peppered dried beef ... 9
Emmanuel Chavassieux (Haute Loire)

Morbier fermier, aged 3 months ... 9
Ferme de Laisia (Jura)

Gruyère fermier, aged 9 months ... 9
Ferme de Laisia (Jura)

Fourme de Monbrison ... 9
Fromagerie La Griotte (Loire)

DINNER

Tonight's bread comes from Maxime Bussy (Le Bricheton)

- Saint-Mandrier palamita rillettes, gold rush zucchini, marigold ... 8.5

- 65° free-range hen's egg from Didier Chevée, sweet onion, almonds, red wine vinegar* ... 7

- Jean-Marie Oçafrain's fermier Basque pork, Ferme de Fontaine chickpeas, wild fennel, savory ... 9

- Antoine Raoul's Breton Pie Noir beef tartare, bianca di Trieste zucchini, ronde de Nice zucchini, black beauty zucchini, Meeker raspberries, Victoria rhubarb, Brunswick red onion, Jean-Marc Gandoin's Valencia late oranges, wild arugula ... 22

- Guilvinec Atlantic horse mackerel with précoce de Quimper tomatoes, blue berry tomatoes, black beauty eggplant, rosemary, coriander, garlic flowers ... 19

- Detroit globe beet and Chioggia beet, Stéphanie Conrad's fresh Normandy cheese, Jean-Marc Gandoin's star ruby pomelo, Ferme de Fontaine green lentils, cinnamon basil ... 16

- Chocolate cake, fleur de sel caramel, sage sorbet, almonds ... 8

- Cyrille Morineaux's Cirafine strawberries, meringue, Stéphanie Conrad's fresh Normandy cheese, Corsican maquis autumn honey, cinnamon basil sorbet ... 8.5

ALL PRODUCTS SERVED ON THE TABLE AND USED IN THE KITCHEN (FROM SALT TO VEGETABLES, CREAM TO MEAT, AND WINE TO SPIRITS)
STRICTLY MEET OUR QUALITY CRITERIA (SEE BACK).
ALL INGREDIENTS COME FROM "RESISTANT" PRODUCERS WHOM WE HAVE MET ON SITE AND WITH WHOM WE ARE IN REGULAR CONTACT.

EVERYTHING ELSE YOU CAN TAKE FOR GRANTED:
fresh ingredients / genuine products / respect for seasonality / homemade / direct supply / transparency / zero waste

This evening's team
In the kitchen: Clement Desbans (Chef) / Anas Alladee / Morvane Gendreau / Backary Dicko
In the dining room: Marc Chauvin / Amelie Fauchey / Davy Tran / Claire Bouin

Service and VAT are included in the prices, which are given in euros. Checks are not accepted.
Origin of the meat: France.

** Contains allergens – ask servers for more information.*
www.lesresistants.fr

OUR QUALITY CHARTER

BASIC COMMITMENTS

The minimum standards for appearing on our menu:

No. 1 Offer ingredients that have real **flavor**
No. 2 Respect **animal welfare** and the **cycles of nature**
No. 3 Favor a **sustainable and extensive production system**
No. 4 Meticulously respect current **food safety rules**
No. 5 Practice **total transparency** (traceability and methods)
No. 6 Prioritize **organic/sustainable agriculture**
No. 7 Sell products at **reasonable prices**
No. 8 Respect **traditional production methods**
No. 9 Protect **agricultural/culinary heritage** and **knowledge**
No. 10 Promote **local resources**—agricultural, human, and technical

SPECIFIC COMMITMENTS

In selecting our ingredients, we use around a dozen ADDITIONAL CRITERIA FOR EACH SPECIFIC PRODUCT

For example, in our restaurant you'll find **only**:
* Vegetables from **traditional varieties**
* Meat and other animal products:
  (i) from hardy/local breeds (e.g. Villard-de-Lans cattle)
  (ii) farmed exclusively outdoors
  (iii) produced with respect for the **natural growth of animals** (e.g. at least 12 months for a pig, compared to 4 months for industrially reared pigs)
  (iv) from animals fed **natural and local** feed
  (v) farmed on a human scale (average 50 animals per farm)
* Wines and spirits produced from **naturally grown and hand-picked grapes** processed using **native yeasts**, **without enological treatments**, etc.

On principle, we **do not allow** (among other things):
* Beef from **silage-fed** cattle
* Products from animals given preventative or systematic **antibiotic treatments**
* Products from agriculture that uses **synthetic chemicals** (pesticides, weedkillers, etc.)
* **Hybrid** fruit and vegetable varieties
* **Artificial additives** (e.g. dextrose)
* All processes aimed at "**de-seasonalization"** (e.g. triploid oysters)
* **Selected yeasts** and **industrial enological enzymes**, **chaptalization**, **acidification**, etc.

SOME OF TODAY'S RESISTANT PRODUCERS:

Grégoire and Fabienne Desnoulez / Lessay, Manche / Vegetables and herbs
Grégoire has been working in Lessay (Manche department) for around two decades. He uses organic methods to farm 3 hectares of magnificent coastal terroir near Lessay, where he grows non-hybrid heirloom varieties of vegetables and herbs. The soil is mostly sandy, but he also grows in the tangue, the typical coastal sediment of the Manche, found in estuaries and swamps. He uses only 100% natural fertilizers, like varech, a mix of seaweeds deposited by the waves along the coast, which helps to grow very special vegetables.

Jean-Marc Gandoin / Penta-di-Casinca, Corsica / Citrus
Jean-Marc is a particularly passionate citrus specialist who was introduced to us by our friend Bruno Tomu from INRA, the French National Institute for Agricultural Research, who has been collaborating with us for over a year. Jean-Marc used to curate the institute's magnificent and unique citrus collections, but once he reached retirement age he opened his own citrus grove near Bastia, where he lovingly tends dozens of varieties of lemons, oranges, kumquats, and citrons. The trees are cultivated according to organic principles, but what really struck us when we met Jean-Marc was the love that he lavishes on his citrus, plus the passion and modesty with which he communicates his encyclopedic knowledge. It gives us great pride to be able to offer our diners a little taste of this paradise.

Cyrille Morineaux / Saint-Cyr-la-Rosière, Orne / Vegetables and fruit
Cyrille and his produce have been an incredible discovery for us. Until a few years ago Cyrille worked in IT and lived near Paris, before deciding to change his life and dedicate himself to horticulture and arboriculture. Cyrille cultivates marvelous organic vegetables on just over half a hectare of land inside Le Perche Regional Nature Park, planting only traditional varieties. He also tends an apple and pear orchard. He talks about his plants with the same care and affection with which he treats them. We hardly need add that the results are delicious!

Pierre-Antoine Battini and Stéphanie Frombolacci / Tox, Corsica / Cured meats (prisuttu, coppa, lonzu, panzetta, bulagna)
Pierre-Antoine and Stéphanie are two young pig farmers and charcuterie artisans. They raise fewer than 200 nustrale pigs strictly outdoors, following traditional ancestral practices. What's striking about them is their constant quest for excellence, both in raising the animals and in how they process the meat, delivering charcuterie of exceptional quality. It should be noted that from the start they followed the PDO specifications that today ensure the quality of a production chain that has not always been properly appreciated.

Maxime Bussy / Paris / Bread
It's hard to sum up Maxime's work in just a few lines: She uses only flours milled from organic landrace varieties of grains, Salorge de la Vertonne salt (Nature & Progres), and water from an artisanal well in Paris, which she collects by bicycle several times a week. Her range of breads is always made fresh and hand-kneaded, using a sourdough starter made from ancient grains that she received from a bread-baking farmer friend. The exceptional results live up to her hard work.

Catherine Griot / Sauvain, Loire / Cheese (Fourme de Monbrison, fourme d'estive, goat tome)
For the Griots, "fourme" is a family tradition going back several generations. Today Catherine is the only producer of organic Fourme de Montbrison. The milk comes from her cousin, Stéphane Griot, a farmer who loves his craft, his cows, and nature, and rears a herd of around 30 Savoiarda cows according to organic agriculture principles. Catherine's Fourme is the kind of raw-milk cheese we love, refined and elegant, with a lingering flavor—a true delight! We are very proud to be able to work with Catherine, who shares many of our values.

READ MORE ABOUT THE OTHER RESISTANT PRODUCERS OF THE DAY IN THE BROCHURE ON THE TABLE OR AT WWW.LESRESISTANTS.FR/RESISTANTS
AND ASK US ANY QUESTIONS YOU LIKE ABOUT THEIR WORK AND THEIR PRODUCTS!

Les Résistants restaurant uses many products from Slow Food projects. Depending on the season, you'll find them on their menu.

Slow Food Presidia

The Slow Food Presidia support the small-scale production of traditional products that risk disappearing, promote local territories, recover ancient methods and processing techniques, and save local breeds and vegetable and fruit varieties from extinction. In France there are 22 Presidia, and worldwide there are more than 570 in over 60 countries.

The list of Presidia can be found at www.slowfood.com:

Auvergne Salers Breed Cheeses
Basque Grand Roux Corn
Basque Pyrenees Mountain Cheeses
Béarn High Pasture Cheeses
Breton Pie Noir Cow
Kintoa Basque Pig
Natural Breton Oyster
Noir de Bigorre Pig
Northern Basque Country Cider
Roussillon Dry Rancio Wine

Ark of Taste

The purpose of the Ark of Taste is to identify endangered plant varieties, local animal breeds, and artisanal food products linked to the cultures, histories, and traditions of communities around the world before they disappear. There are over 300 Ark products from France, and over 5,000 from around the world.

The list is available on www.slowfood.com:

Abouriou Grape
Armoricaine Cattle
Artisanal Valcivières Cheese
Avranchin Sheep
Basco-Béarnese Sheep Greuil
Bayeux Pig
Bazadaise Cattle
Belle d'Argenteuil Asparagus
Belle-Ile Sheep
Blue Solaize Leek
Cotentin Sheep
Coucou de Rennes Chicken
Fruité Noir Olive Oil
Gascony Mirandais Cattle
Gatinaise Chicken
Landes de Bretagne Sheep
Livradois-Forez Farmhouse Cheese
Lorient Cabbage
Nustrale Pig
Petit Gris de Rennes Melon
Piment d'Espelette
Poitou Goat
Pontoise Cabbage
Roussin de la Hague Sheep
Rove Goat
Solognot Lamb
Sucrine du Berry Squash
Villard de Lans Cattle
Violet de Gournay Radish
Western White Pig

Profiles of the producers are on the **restaurant** website.



Kintoa Basque Pig



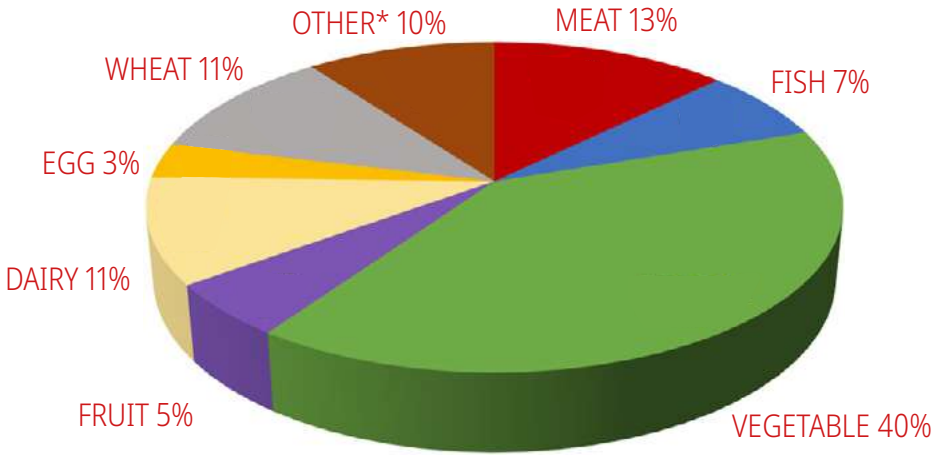
Salers Cheeses

CONSUMPTION

INPUT	QUANTITY/year	UNITS	NOTES
meals	30,000	n.	average of 120 diners per day
electricity	61,360	kWh	30% for heating (heat pump), 45% for kitchen, 20% for fridges, 5% for lighting
gas	56,166	kWh	used only in the kitchen
water	250,000	L	assumed 1 m^3/day
detergents	516.75	L	organic and eco-friendly soap, transport by electric vehicles
doggy bags	150	kg	assumed 1 doggy bag for every 10 diners
meat	3,600	kg	about 300 kg/month (carcass weight): 35% pork, 25% beef, 25% chicken, 10% lamb, 5% rabbit
fish	2,000	kg	about 40 kg/week, 95% from sea, 5% from lake
vegetables	11,250	kg	about 200 kg/week. This quantity includes 25 kg/week of mushrooms
fruits	1,500	kg	about 30 kg/week
dairy products	2,930	kg	cheese: about 10-15 kg/month, butter: about 10 kg/week, cream: about 15 kg/week, milk: about 25 kg/week, yogurt: about 5 kg/week
eggs	950.4	kg	about 1,440 eggs per month, used to make desserts
grain-l based products	3,100	kg	bread: about 10 kg/day, flour: about 50 kg/ month
other	2,885	kg	olive oil: about 1L/day, salt: about 5 kg/month, coffee: 3 kg every 10 days, nuts: about 10 kg/week, almonds: about 10 kg/week, chocolate: about 10 kg/week
wine	4,687.5	L	about 25 bottles (0.75L)/day (in glass bottles, or in bag in box)
wasted food	0		no waste

Ingredients used at Les Résistants in 1 year (% by weight)

Beverages (mostly water and wine) are excluded. If considered, they would account for 41% of the ingredients consumed (with 10% for wine)

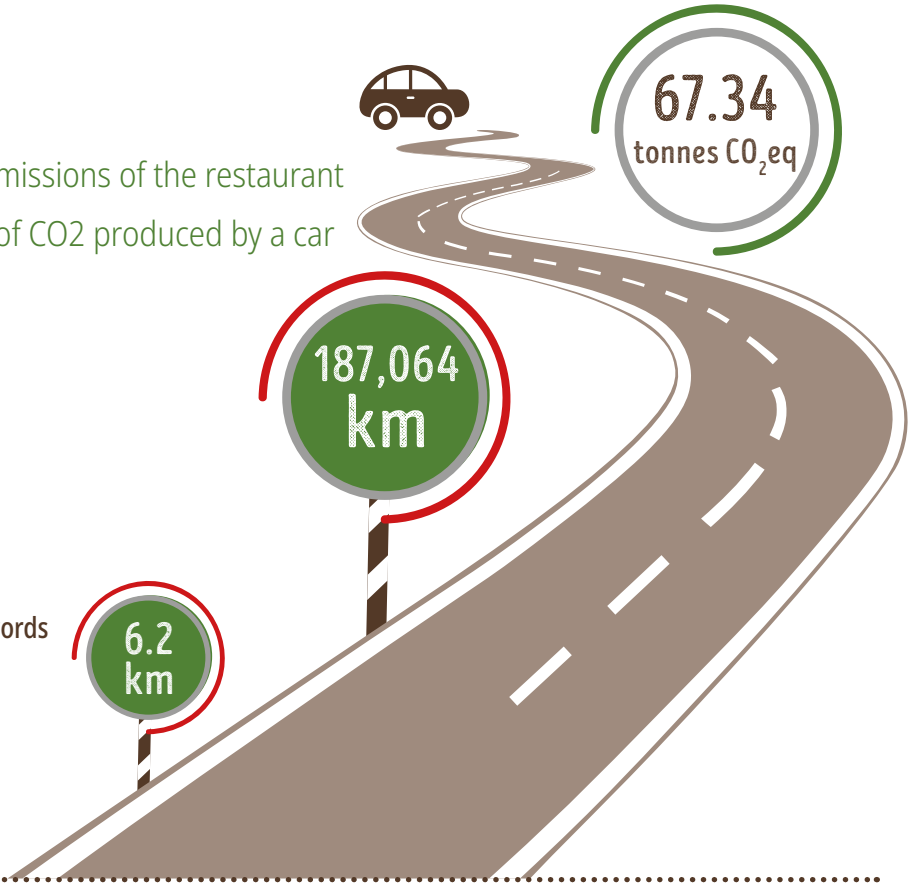


* *Like almonds, hazelnuts, olive oil, chocolate, tea, coffee, sugar...*

CARBON FOOTPRINT

The annual greenhouse gas emissions of the restaurant are equivalent to the amount of CO2 produced by a car traveling on a journey of...

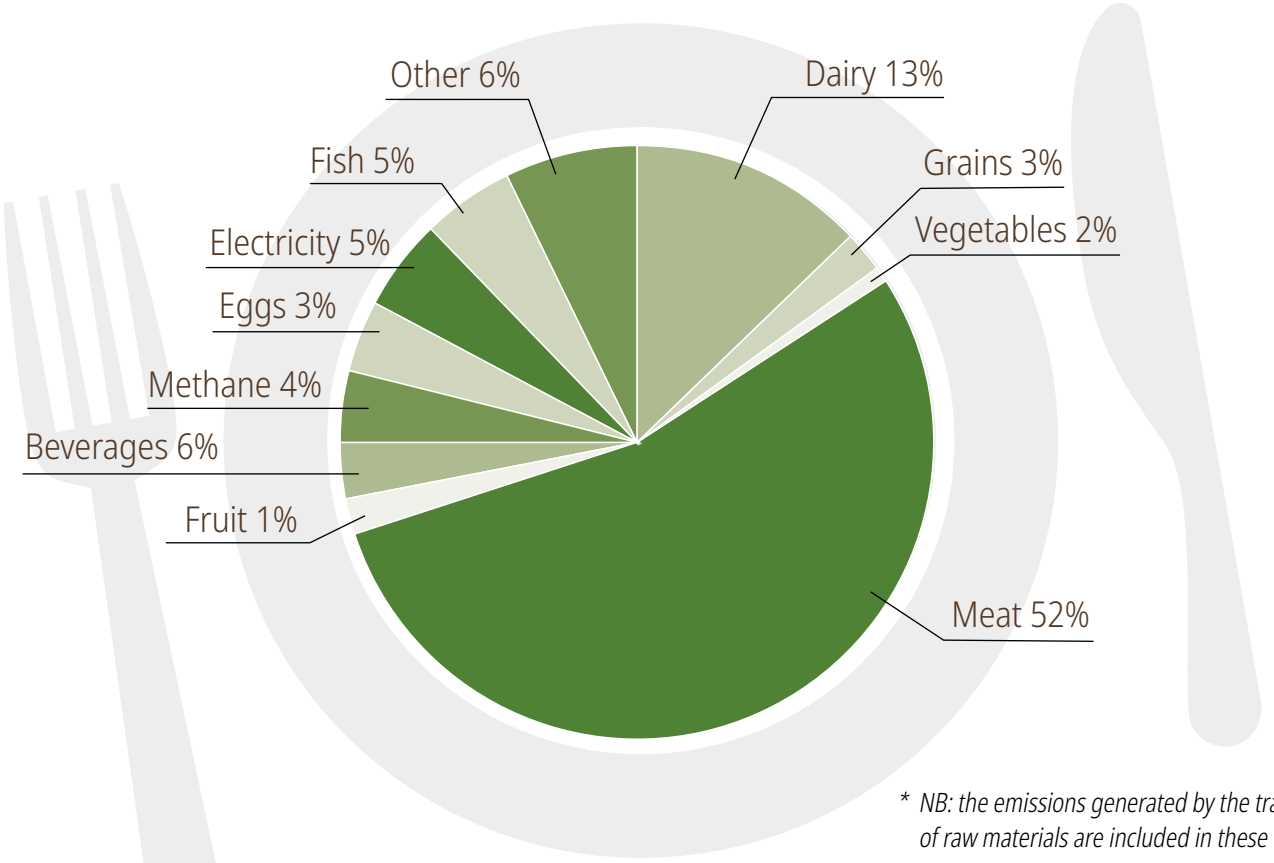
... **187,064 km!**



The emissions from the consumption of an average meal correspond to **2.24kg CO_{2}^{eq}**

In other words **6.2 km**

Where does the greatest environmental impact come from*?



* *NB: the emissions generated by the transport of raw materials are included in these figures.*

The Carbon Footprint of Les Résistants was compared with that of two different restaurant models:

Restaurant A

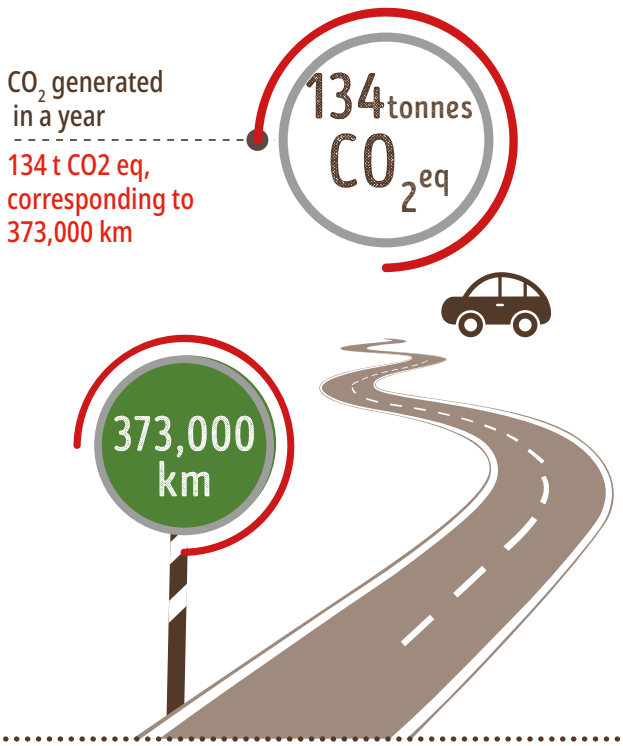
- Same number of daily meals served;
- Similar menu;
- Same management model, including zero waste;

BUT: products are conventional instead of organic/agroecological.

> The Carbon Footprint of this restaurant corresponds to a car traveling for

373,000 km

The impact of this restaurant is double that of Les Résistants!



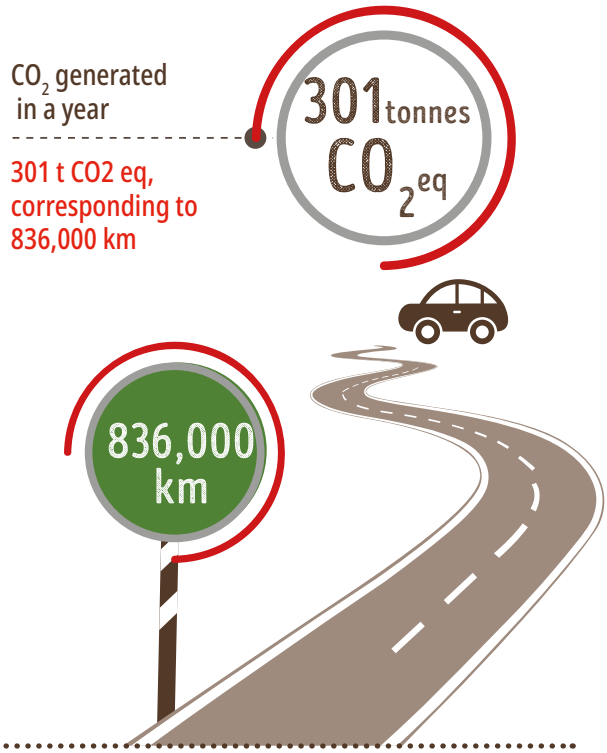
Restaurant B

- Same number of daily meals served;
  BUT: different menu, higher ratio of meat to vegetables (a common situation);
- Products are conventional instead of organic/ agroecological;
- Management model is not conscientious (e.g. there is waste in the kitchen/dining room, common detergents are used...)

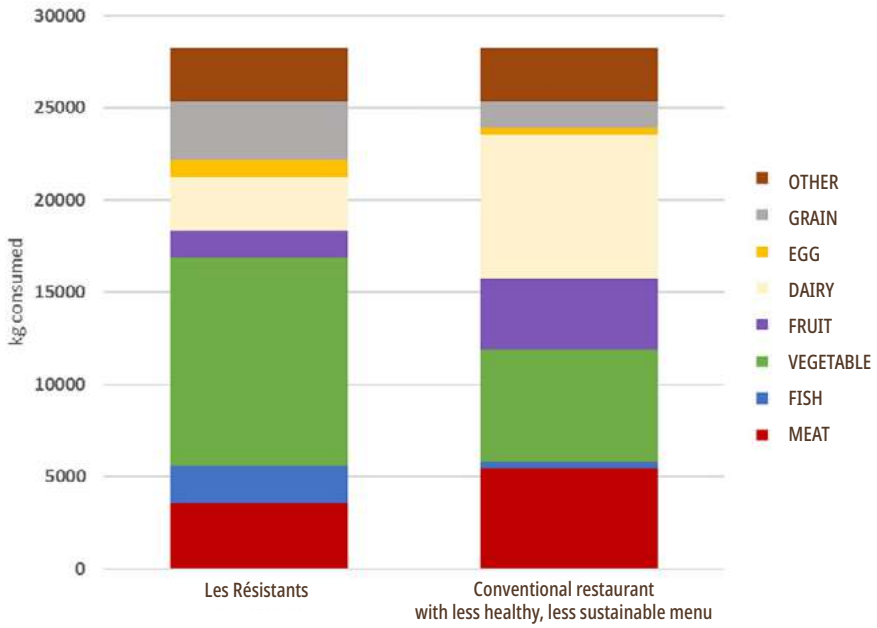
> The Carbon Footprint of this restaurant corresponds to a car traveling for

836,000km

The impact of this restaurant would be 4.5 times higher than that of Les Résistants!



Comparison between the ingredients used



Comparison between the ingredients used by Les Résistants and those from a conventional restaurant that offers an unbalanced diet that is negative for the climate and produces food waste.

If we isolate the impact of transport, the difference between the three restaurants is particularly evident



Les Résistants **5.1%** 3,408.9 kg CO_2 eq



Restaurant A **13.1%** 17,587 kg CO_2 eq



Restaurant B **18.8%** 56,731 kg CO_2 eq

BEST PRACTICES IMPLEMENTED AT LES RÉSISTANTS



Menu based mainly on vegetables, with a limited quantity of high-quality meat dishes that change daily depending on what is available



Meat selected from free-range livestock farms; local breeds; use of whole carcass



Seasonal ingredients used



Suppliers carefully chosen based on their conscientious management and quality products. Holistic approach



Relationships with farmers who minimize the use of chemicals and machinery in the field. Promotion of local, agroecological, self-sufficient agriculture



Anti-waste policy and exemplary treatment of waste within a circular model: Everything is reused



Use of ecological detergents with a reduced impact on the environment



Microfiltered tap water provided



Use of simple table settings without disposable items and with cloth napkins that are washed on the premises



Promotion and protection of traditional, manual production techniques (which therefore emit no CO2)

The study shows how, within the restaurant world, sustainability is highly conditioned by a careful selection of ingredients, which must be produced according to virtuous agricultural practices. This aspect is much more important in determining the environmental impact than the distances traveled by individual products. The concepts of the short supply chain and zero food miles, particularly within the context of large cities, have a relative value. In the case of Les Résistants, the fact that their suppliers are all over the country is optimal in part thanks to good logistical organization. Their zero-waste policy also has a significant influence on limiting their environmental impact.

Considerable differences can be seen when making a comparison with a conventional set-up, which generally involves sourcing ingredients from the global market. But the differences become particularly striking when the comparison is with a type of restaurant that does not pay attention to the origin and quality of its ingredients, offers a menu with many recipes based on meat and dairy, and does not worry about avoiding waste in the kitchen. By now it is common knowledge that intensive industrial animal farming has serious environmental impacts; according to the FAO 14.5% of all climate-altering emissions come from the livestock sector. Meanwhile, at a global level, around a third of all food produced ends up wasted, accounting for around 10% of emissions.

SUPPLY CHAIN HOTSPOTS:

- High electricity and gas consumption, even though this has only a minor effect on the overall impact of the business. Possible solutions include structural interventions such as the installation of induction plates, the optimization of the air-conditioning system, and the use of renewable energy sources (solar panels). One of the critical aspects requiring more work is energy. If clean energy sources were used and induction cooktops were installed, for example, it would be possible to save another 3 t of CO2 eq/year, corresponding to 9,000 km/year.

- A wide network of suppliers nationwide. However, the study shows that the impact of transport, which is well optimized, is not significant, although it would be desirable to use closer suppliers. It is evident that sustainable production has more conspicuous effects in terms of reducing impact than the somewhat obsessive zero-food-miles concept.

METHODOLOGY, STANDARDS, AND REGULATORY REFERENCES

This report summarizes the results of the life cycle assessment (LCA) of the Les Résistants restaurant business in Paris. The analysis was prepared in compliance with ISO 14040-14044:2006 regulations, "Environmental Management: Life Cycle Assessment."

The process involved a careful inventory analysis of all the life cycle processes, from the sourcing and choice of ingredients to transport and food preparation, including all the materials and energy consumed by the restaurant and the waste it produced.

The impact category taken into consideration is Carbon Footprint (CFP)/Global Warming Potential (GWP100), namely the estimate of greenhouse gas emissions—e.g. CO2 (carbon dioxide), CH4 (methane) and N2O (nitrous oxide)—expressed in kilos of carbon dioxide equivalent (CO2 eq).

The study backed up the inventory analysis with the Ecoinvent 3.4 data bank. The model was developed with the help of LCA SimaPro 8.0.3 software, selecting the single-issue GHG protocol method updated to IPCC 2013 factors. Since existing databases (e.g. Ecoinvent) do not record emissions caused directly by fossil fuels, ad hoc models were developed for the case study in question (IPCC guidelines, 2006). The data obtained were compared with analogous conventional activities.

This LCA report includes the results of analysis of impacts associated with the life cycles of the products and a summary of the principal conclusions deduced from interpretation of the results.

The carbon footprint (CF) calculated via the LCA is based on the restaurant's business (functional unit, FU) over one year: 2018.





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